UGO Vs 4.0

Wireless Portable Mini Speaker

Instruction Manual

Contents:

1. Introduction
2. Speaker Modes & Controls
3. Functions
4. Troubleshooting Guide
5. Specification Sheet
6. Warranty

Bluetooth®

www.ugospeakers.com

Congratulations!
You have one of the most versatile and innovative personal speakers available.

Package Contents
1. Speaker
2. 2 in 1 cable for charging and playing
3. FM detachable antenna
4. Instruction sheet

Vs 4.0 Operating Manual

Speaker Modes & Controls

The Speaker can operate in four different modes. To switch between modes press the Mode button.

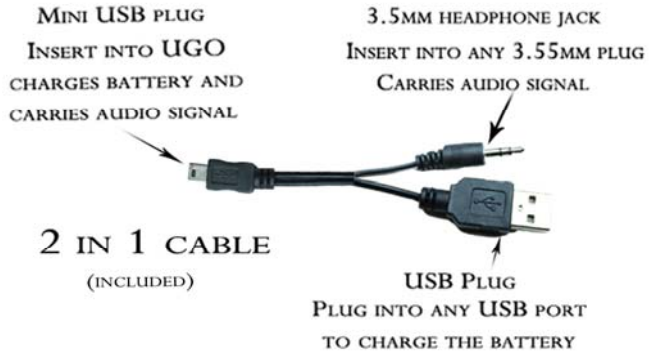
Mode 1. Bluetooth.
PAIRING INSTRUCTIONS: Turn your UGO speaker on. You will hear a beep. The blue light will blink rapidly. This indicates that the UGO is ready to pair. Use the following chart to help pair to your device. To play audio you must pair and connect. Your UGO can pair to many devices but can only connect to one at a time.
PLAYING: Your UGO can play audio from a variety of devices. Once you have paired and connected your device to the UGO follow instructions from your app or program to play audio.

TO PAIR TO AN ANDROID PHONE 1. Open: **Settings** 2. Open: **Wireless and Network** **3.** Open**: Bluetooth Settings.** 4. Turn: B**luetooth on if it is off.** **5.** Touch: **Search for Devices** 6. Touch and hold - **UGO** 7. Touch **Connect.**	TO PAIR TO AN I PHONE OR IPAD 1. Open: **Settings** 2. Turn: **Bluetooth** on (if it is off). 3. Touch and hold: **UGO** found under **Devices,** it will be labeled Not **Paired** 4. Touch: The word **UGO** - it will say **Connected**
TO PAIR TO A MAC OS COMPUTER 1. Open: **System Preferences** **2. Op**en: **Bluetooth** **3. C**lick: the + button to add a Bluetooth device. 4. Select: **UGO** 5. Click: **Continue** - the computer will Pair with the device. If asked: The pass code is **0000**	TO PAIR TO A WINDOWS OS COMPUTER 1. Open: **Devices and printers** 2. Click: **Add a device** 3. Select: **UGO or Bluetooth headset** 4. Click: **Next** 5. Input: Pass code **0000** if necessary

Mode 2. Micro SD card: Use a computer or Android phone to transfer music files to a Micro SD card. Note: You must use MP3 files. To convert files to MP3 format see our troubleshooting guide at ugospeakers.com.
Insert the Micro SD card directly into the slot labeled Micro SD. It will click into place. Your music will play automatically. When playing in MICRO SD mode the green light will blink slowly. To switch to a different mode with the Micro SD card inserted in the speaker – push Mode.

Mode 3. FM Radio. Attach the included antenna to the UGO into the slot labeled LINE/ANT. Note: (The 2 in 1 cable is also an excellent antenna when connected to the UGO.)
Push the mode button until you hear static. Push the green pause/play button. The UGO will automatically scan and load all FM radio stations within range. Once it stops scanning you can switch stations by pushing the Vol. up or down buttons. To change the volume push and hold the Vol. up or down button until the volume reaches the desired level.
When the UGO is searching for FM stations the yellow light will blink rapidly. When playing an FM station the yellow light will blink slowly.

Mode 4. Line Connection. Plug the single end of the 2 in 1 cable (mini USB plug) into the UGO speaker. The double end of the 2 in 1 cable has a 3.5 mm headphone plug - this can be inserted into any audio device with a corresponding 3.5 mm jack. The audio signal will travel through this connection. If the audio does not play press the mode button until you are in the Line mode.
When the UGO is playing through the Line connection the light will be a constant yellow.



WHAT THE BUTTONS DO:
Off/On. This button turns the UGO on and off. The UGO has a lengthy stand by mode but to conserve your battery do not leave the UGO on if not in use.

Mode. Push this button to cycle through audio modes. You can switch easily between the Line connection, Bluetooth, Micro Sd or FM Radio mode.

Pause/Play. Pauses or plays audio in every mode except FM Radio. In FM Radio Mode push the green Pause/Play button once and the UGO will automatically search and load available FM radio stations.
While in Bluetooth mode - when connected to a cell phone- this button will also answer/end incoming phone calls.
Volume up/down. Push and hold to increase or lower volume in all modes. Push once to change tracks or radio stations in Micro SD, or FM Radio mode. While in Bluetooth Mode push once and the UGO will change tracks on your device.

WHAT THE BUTTONS DO
PUSH TO CYCLE THROUGH
SD, AUX IN AND FM MODES
ANSWERS/ENDS PHONE CALLS
PAUSE/PLAY IN EVERY MODE BUT FM
IN FM MODE PUSH TO SEARCH/STORE STATIONS
ANSWERS/ENDS INCOMING PHONE CALLS
VOL. UP/DOWN BUTTONS
PUSH AND HOLD TO CHANGE
VOLUME.
IN MICRO SD OR FM MODE PUSH
ONCE TO CHANGE TRACK OR STATION
IN BLUETOOTH MODE PUSH TO CHANGE
TRACKS ON YOUR DEVICE

WHAT THE LIGHTS MEAN:
Switch Is On Using The Battery

Blue rapid binking	UGO is ready to pair
Blue slow blinking	UGO paired to device but not connected
Blue constant	UGO paired to device - connected and playing
Yellow constant	Line connected and playing
Yellow blinking rapidly	UGO searching and loading FM stations
Yellow slow blinking	FM radio is playing
Green slow blinking	Micro SD is playing

Switch On And Connected To Charger

Red-Blue rapid blinking	UGO is ready to pair and is charging
Red-Blue slow blinking	UGO paired to device but not connected and charging
Red-Blue constant	UGO paired to device–connected, playing - and charging
Red-Yellow Constant	Line connected, playing and UGO is charging
Red-Yellow blinking rapidly	UGO searching & loading FM stations and charging
Red-Yellow slow blinking	FM radio is playing and UGO is charging
Red-Green slow blinking	Micro SD is playing and UGO is charging

Switch Off and Connected to Charger

Red Light Constant	UGO is charging
No light	UGO is charged

Headphone Jack: Plug headphones into your UGO for private listening. Use UGO Tangle Free ear buds for enhanced listening without the hassle of tangled wires. Get these at ugospeakers.com

CHARGING YOUR UGO: Your UGO comes partially charged. To charge the UGO connect the 2 in 1 cable to the speaker. Connect the USB plug on the other end of the cable to any USB port. This can be the USB port on a computer, wall adaptor or car charger. Once connected the UGO will automatically charge. A full charge takes approximately 2 hrs.
If the UGO is switched off and charging a constant red light will show. If the light goes off the UGO is fully charged. Partial charging will not affect the life of the battery. Do not store the UGO with a dead battery.

CHARGING WHILE PLAYING: You can charge the UGO and play audio at the same time. If the sound quality starts to distort the battery is fully charged, to eliminate this distortion unplug the charging cable.

CARE OF YOUR UGO: Do not let the UGO come in contact with water. Do not leave it in direct sunlight or other hot place. Do not store your UGO with a dead battery. Clean with soft cloth. Do not use harsh chemicals to clean. Do not drop or place heavy objects on the UGO. Never try to repair or open your UGO yourself.

TECHNICAL SPECIFICATIONS

1. Operating voltage 3.7V
2. Charging Voltage 5V
3. Output power 3V
4. Speaker spec: 40mm 2.6Ω 3W
5. Battery capacity: 430 mA/H
6. Frequency response: 60 Hz – 18Khz
7. THD: <0.5%
8. SNR: >95dB
9. Size: D 60mm H 54cm
10. Play time is approximately 4 hours at full volume.

More Information:
For additional tips, and troubleshooting go to ugospeakers.com

Warranty Info
Your UGO speaker is guaranteed to be free of defects for 12 months from date of purchase. Simply return the defective UGO with your original receipt for free repair or replacement. Warranty void if the speaker has been tampered with.

Lifetime Warranty
If your 12-month warranty has expired or you have damaged your UGO and would like it replaced see web site to purchase a Lifetime Warranty.

Contact:
Website: ugospeakers.com **Email:** info@ugospeakers.com

Troubleshooting your Bluetooth UGO Vs 4.0

PROBLEM:	SOLUTION:
The speaker doesn't play	Turn the power button to 'ON' position. Make sure the speaker is charged. If you are not sure that the battery is charged attach the charging cable to the UGO and plug the other end into any active USB port. Make sure the volume of your device is turned up. Make sure the volume on the speaker is turned up. Check to be sure the UGO is in the correct MODE. Do this by pushing the MODE button. Make sure that the play/pause button is not in pause position. If connected wirelessly check status of the device that is connected. Make sure that the UGO is paired – connected and that the media is playing. Try pressing the Mode button to switch modes. Try turning the power Off then back On.
Your Micro SD card is inserted into the UGO but the music doesn't play.	Make sure the power button is in the 'ON' position. Songs must be in MP3 format. If your songs are in a different format go to the trouble-shooting guide on our web site, ugospeakers.com. Choose support for MICRO SD card. There you will find instructions that will help you reformat your files to MP3. Check that the battery is charged. Try Pressing the Pause/ Play button. Make sure SD card is inserted with printing up and is pushed in until you hear a click. Try pressing the MODE button to be certain you are in Micro SD mode.

I can't pair my device to the UGO.	See instructions for the Bluetooth UGO on our web site ugospeakers.com. There are detailed instructions on how to pair most devices. If you still cannot pair your device contact the manufacturer of your device for additional information. Try using an alternate device to pair to the UGO. Many times the problem is with the device not the speaker. PAIRING MULTIPLE DEVICES: The UGO can be paired to multiple devices, but can only **CONNECT** to one device at a time. Pairing and connecting are two different things. To play audio using Bluetooth you must be paired and connected to the device. If another device is already paired to the UGO you need to turn off the Bluetooth function or power of that device or un-pair it from the UGO to connect a new device. When you turn on the UGO you will know it is available to pair if the blue light blinks rapidly. Once paired the light will stay solid blue. If you are still unable to pair your device, the UGO is paired to another device.
The Bluetooth function is connected but has poor sound quality.	Charge the battery. There are different versions of Bluetooth technology. These (older) versions are sufficient to use a wireless mouse or keyboard but do not transfer data quickly enough to play music. You can still plug the UGO to the device using the supplied audio cable for excellent sound quality.
The sound quality coming from the speaker is poor.	If the UGO is completely charged and still attached to the charger the sound quality may distort or crackle. Unplug the charging cable. In FM Mode try using the charging cable for an antenna. Try moving the cable into different positions for better reception.

My FM radio stations do not come in clearly.	Try using the charging cable as an antenna. Plug in normally. You can even charge the UGO at the same time. Radio signals must be strong for a good connection.

Specification

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1. **General specification**
2. **Product photo**
3. **Pin Functions**
4. **Block diagram**
5. **Example Application Schematic**
6. **Application software**

1. General Specification

General Description

BlueCore® BC6145™ Module is a low-cost fully-featured ROM IC solution for Bluetooth mono headsets with extremely low power consumption. The BC6145 module ensures increased speech clarity and improves intelligibility through spectral enhancement, with the bidirectional noise reduction Hear and Be Heard feature. BC6145 module reduces the number of external components required, minimising production costs. It includes a Bluetooth radio, baseband, Kalimba DSP, DAC/ADC, switch-mode power supply and battery charger in a QFN package for low-cost designs.

The Kalimba DSP coprocessor supports enhanced audio applications. A2DP streaming enables music playback on a mono headset. BC6145 module includes CVC single-microphone echo and noise reduction, which reduces headset echo enabling the headset-user to be heard more clearly. A low-power wind noise reduction feature improves intelligibility in windy environments.

1.1 Device Features:

- 6th generation 1-mic CVC audio enhancements
- HFP v1.6 and HSP v1.2.
- A2DP v1.2 for high-quality mono music streaming
- Non-Linear Echo Reduction (NLER) feature for low[8] cost speakerphones and car-kits
- Low power consumption: over 11 hours talk time from a 120mAhr battery
- Advanced multipoint support: enables a headset
- (HFP) connection to 2 phones for voice
- Multipoint A2DP streaming: enables a mono headset (A2DP) connection to 2 A2DP source devices for music playback
- Secure simple pairing, CSR's proximity pairing and CSR's proximity connection
- 64MIPS Kalimba DSP coprocessor

- High-quality mono codec with 95dB SNR DAC
- Green (RoHS compliant and no antimony or halogenated flame retardants)
- Size:18mm(L) X 13.5 mm(W)

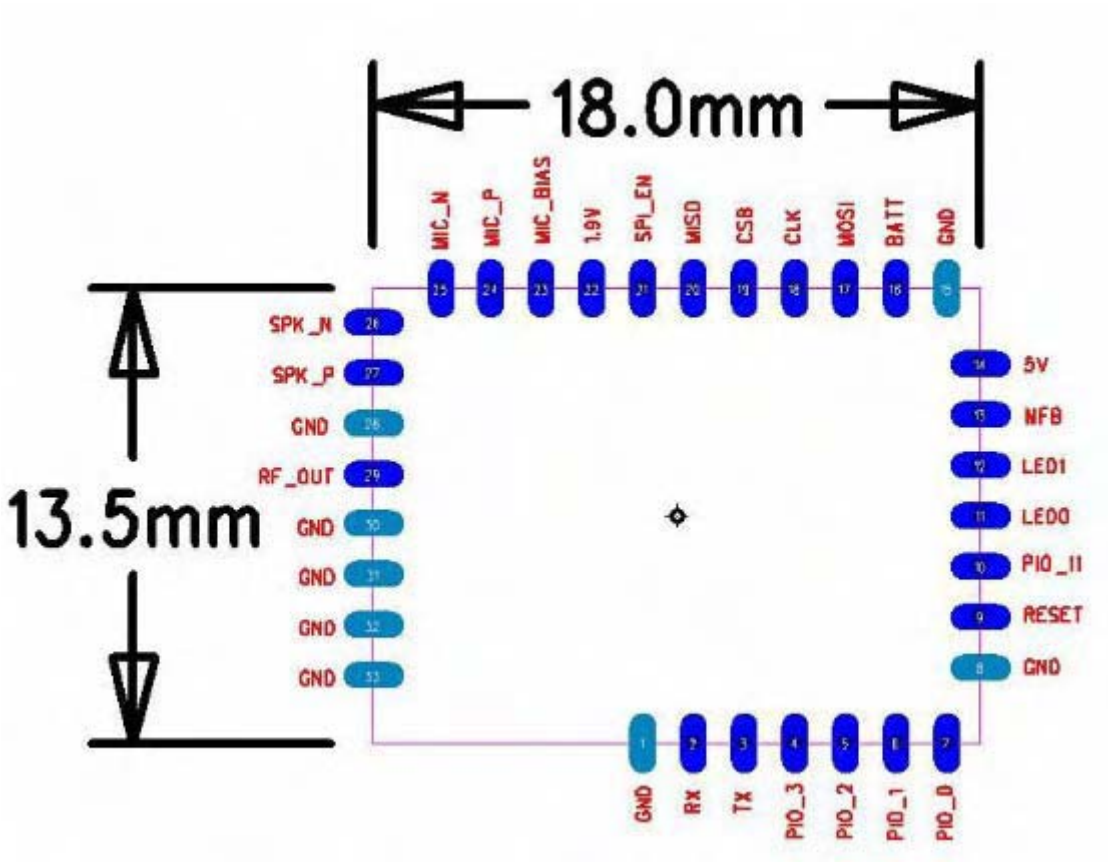
1.2 Applications

■ BC6145 DSP mono headset solution
■ Low-cost speakerphones and car-kits
BC6145 Module supports secure simple pairing which simplifies the pairing process and makes it easier to use a Bluetooth headset.
The device includes auto-calibration and BIST routines to simplify development, type approval and production test.

1.3 Device Details: (BC6145)

Radio
■Bluetooth v4.0 specification compliant Transmitter
■8.5dBm RF transmit power with level control from on-chip 6-bit DAC over a dynamic range typically >30dB
■Receiver sensitivity of -91dBm
Synthesiser
■Compatible with crystals 16MHz to 26MHz
Baseband and Software
■Support for Bluetooth v3.0 specification when using updated configuration
■Internal ROM
■48KB of internal RAM, enables full-speed data transfer, mixed voice/data and full piconet support
■Configurable mono headset ROM software to set-up headset features and user interface
■HFP v1.6 and HSP v1.2
■CSR's proximity pairing (headset-initiated pairing)
■Supports mSBC wideband speech decoder
■ DSP-based 6th generation 1-mic CVC echo and noise cancellation for effective noise cancellation under all conditions
■Integrated amplifiers for driving a 16Ω speaker; no need for external components
■Support for single-ended speaker termination and line output
■Integrated low-noise microphone bias
■Digital enhancements to add bass cut and side tone
■Analogue enhancements to support single-ended speaker drive capability and reference availability
Physical Interfaces
■Battery charger with programmable current, 20mA to 150mA for lithium ion/polymer battery. Supports external boost charge for up to a total of 240mA fast charge current
■2 LED drivers with faders

2. Product photo

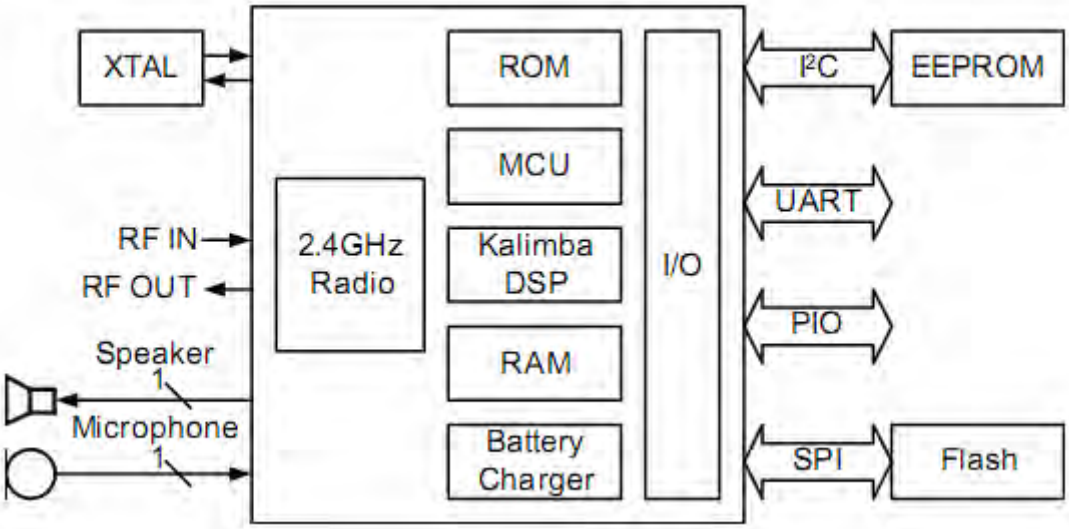


3. Pin Functions

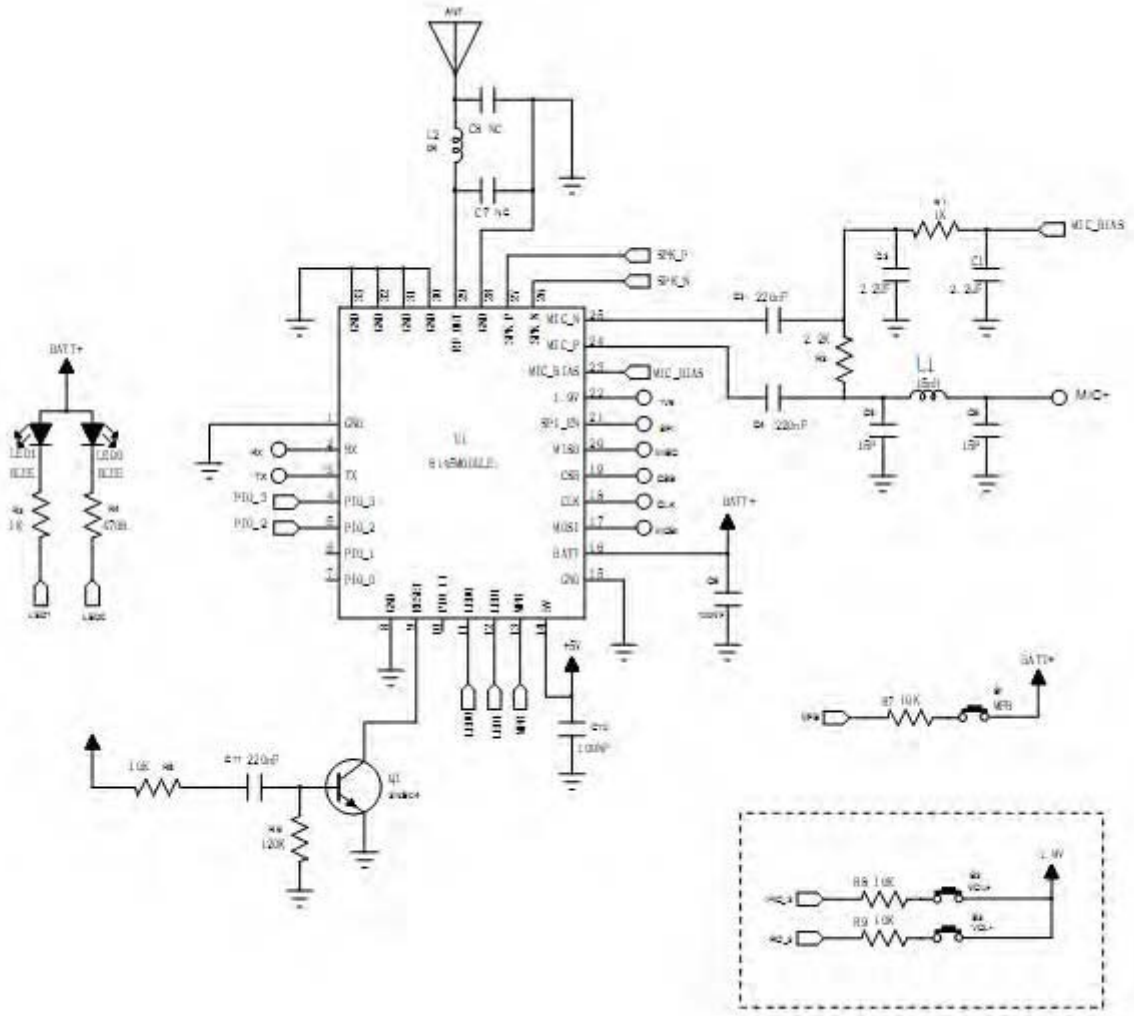
PIN Name	PIN#	Description	Pad Type
GND	1,8,15,28,30,31,32,33	Ground port	VSS
RX	2	UART data input, active high.	Bidirectional with weak internal pull-down
TX	3	UART data output, active high.	Bidirectional with weak internal pull-up
PIO_3	4	Programmable input/output line PIO[3] is chip select for SPI flash interface (BC6145 is master).	Bidirectional with programmable strength internal pull-up/down
PIO_2	5	Programmable input/output line	Bidirectional with programmable strength internal pull-up/down
PIO_1	6		
PIO_0	7		
RESET	9	Reset if low. Input debounced so must be low for >5ms to cause a reset	Input with weak internal pull-up
PIO_11	10	Programmable input/output line.	Bidirectional with programmable strength internal pull-up/down
LED0	11	LED driver	Open drain output
LED1	12	LED driver	Open drain output

MFB	13	Multi-Functional Button	VREGENABLE_H
5V	14	Lithium ion/polymer battery charger input	VDD_CHG
BATT	16	Lithium ion/polymer battery positive terminal. Battery charger output and input to switch-mode regulator	BAT_P
MOSI	17	SPI data input	Input, with weak internal pull-down
CLK	18	SPI clock	Bidirectional with weak internal pull-down
CSB	19	Chip select for SPI, active low	Bidirectional with weak internal pull-down
MISO	20	SPI data output	Bidirectional with weak internal pull-down
SPI_EN	21	Debug interface input	Input with strong internal pull-down
1.9V	22	High-voltage regulator output	VREGOUT_H
MIC_BIAS	23	Microphone bias	Analogue
MIC_P	24	Microphone input, positive	Analogue
MIC_N	25	Microphone input, negative	Analogue
SPK_N	26	Speaker output, negative	Analogue
SPK_P	27	Speaker output, positive	Analogue
RF_OUT	29	SPI clock	Transmitter output/switched receiver

4. Application Block diagram



5. Example Application Schematic



6. Electrical Characteristics

7.1 Absolute Maximum Ratings

Rating	**Min**	**Max**
Storage temperature	-40℃	+85℃
Supply voltage: +5V (Charger IN)	-0.4	6.5V

7.2 Recommended Operating Conditions

Operating Condition	**Min**	**Max**
Operating temperature range	-20℃	+60℃
Supply voltage: +5V (Charger IN)	4.75V	5.25V
Supply voltage: BATT	3.0V	4.2V

Warranty Info

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Lifetime Warranty Purchase
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To obtain warranty service on your UGO product, please visit our web site:
www.ugospeakers.com

or email us directly:
info@ugospeakers.com

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